

1. Nozzle for washing a gas turbine unit (1) arranged to atomize a wash liquid in the air stream in an air intake (2) of said gas turbine unit (1) comprising a nozzle body (40) comprising an intake end (41) for intake of said wash liquid and outlet end (55) for exit of said wash liquid, c h a r a c t e r i z e d in that a number of orifices (42, 46; 42, 46, 60) are connected to the outlet end (55) and in that respective orifice (42, 46; 42, 46, 60) is directed towards a centre axis (49) of said nozzle body (40) at a junction point (57) at a distance within a range of 5-30 cm from said orifice openings (43, 47; 43, 47, 61) and at an angle towards the centre axis (49) so that the liquid emanating from respective orifice opening (43, 47; 43, 47, 61) is within an angle range of 0-80°.
2. Nozzle according to claim 1, c h a r a c t e r i z e d in that each of said orifices (42, 46; 42, 46, 60) is arranged at substantially the same distance from said centre axis (49) and at substantially the same angle with respect to said axis that constitutes an extension of said centre axis (49).
3. Nozzle according to claim 1 or 2, c h a r a c t e r i z e d in that the liquid pressure in said orifices (42, 46; 42, 46, 60) is within the range of 35 – 175 bar.
4. Nozzle according to claim 3, c h a r a c t e r i z e d in that said orifice openings (43, 47; 43, 47, 61) are arranged to, in cooperation with said liquid pressure, cause said liquid to stream out with a liquid velocity in the range of 50 – 250 m/s.
5. Nozzle according to any one of preceding claims, c h a r a c t e r i z e d in that each of said orifice openings (43, 47; 43, 47, 61) has substantially the same design.
6. Nozzle according to any one of preceding claims, c h a r a c t e r i z e d in that said orifices (42, 46; 42, 46, 60) are arranged to form a spray into a form in accordance with any one of from the group of substantially circular, substantially elliptical or substantially rectangular.

7. Nozzle according to any one of preceding claims, c h a r a c t e r i z e d in that two orifices (42, 46) are connected to said outlet end.

8. Method for washing a gas turbine unit (1) comprising the step of atomizing a wash liquid in an air intake (2) of said gas turbine unit (1) by using a nozzle (54) comprising a nozzle body (40) comprising an intake end (41) for intake of said wash liquid and an outlet end (55) for exit of said wash liquid, c h a r a c t e r i z e d by the step of
producing said atomized wash liquid by delivering said liquid to a number of orifices (42, 46; 42, 46, 60) connected to said outlet end (55), wherein respective orifice (42, 46; 42, 46, 60) is directed towards a centre axis (49) of said nozzle body (40) at a junction point (57) at a distance within a range of 5-30 cm from said orifice openings (43, 47; 43, 47, 61) and at an angle towards the centre axis (49) so that the liquid emanating from respective orifice opening (43, 47; 43, 47, 61) is within an angle range of 0-80°.

9. Method according to claim 8, c h a r a c t e r i z e d by the step of directing the liquid emanating from the each of the orifices (42, 46; 42, 46, 60) against said axis that constitutes an extension of said centre axis (49) with substantially the same angle by arranging each of said orifices (42, 46; 42, 46, 60) at substantially the same distance from said centre axis (49) and at substantially the same angle with respect to said axis that constitutes an extension of said centre axis (49) and at substantially the same angle with respect to said axis that constitutes an extension of said centre axis (49).

10. Method according to any one of the claims 8 or 9, c h a r a c t e r i z e d in that the liquid pressure in said orifices (42, 46; 42, 46, 60) is within the range of 35 – 175 bar.

11. Method according to any one of the claims 8-10, c h a r a c t e r i z e d in that said orifice openings (43, 47; 43, 47, 61) are arranged to, in cooperation with said liquid pressure, cause said liquid to stream out with a liquid velocity in the range of 50 – 250 m/s.

12. Method according to any one of the claims 8-11, characterized in that each of said orifice openings (43, 47; 43, 47, 61) has substantially the same design.
13. Method according to any one of the claims 8-12, characterized in that said orifices (42, 46; 42, 46, 60) are arranged to form a spray into a form in accordance with any one of from the group of substantially circular, substantially elliptical or substantially rectangular.
14. Method according to any one of the claims 8-13, characterized in that two orifices (42, 46) are connected to said outlet end.
15. Washing device for washing a gas turbine unit (1) comprising at least one nozzle arranged to atomize a wash liquid in the air stream in an air intake (2) of said gas turbine unit (1) comprising a nozzle body (40) comprising an intake end (41) for intake of said wash liquid and outlet end (55) for exit of said wash liquid, characterized in that said at least one nozzle comprises a number of orifices (42, 46; 42, 46, 60) are connected to the outlet end (55) and in that respective orifice (42, 46; 42, 46, 60) is directed towards a centre axis (49) of said nozzle body (40) at a junction point (57) at a distance within a range of 5-30 cm from said orifice openings (43, 47; 43, 47, 61) and at an angle towards the centre axis (49) so that the liquid emanating from respective orifice opening (43, 47; 43, 47, 61) is within an angle range of 0-80°.
16. Washing device according to claim 15, comprising at least one nozzle according to any one of claims 2-7.